## **CLAIMS**

1. A solid electrolyte composition for cathode comprising a polyether polymer, an active material of positive electrode, conductive fine particles, an electrolyte salt compound and a photopolymerization initiator, said photopolymerization initiator being contained in an amount of 2 to 30 parts by weight on the basis of 100 parts by weight of the polyether polymer.

5

15

20

25

30

- 2. The solid electrolyte composition for cathode according to claim 1,
  wherein said photopolymerization initiator is contained in an amount of 3 to 15
  parts by weight on the basis of 100 parts by weight of the polyether polymer.
  - 3. The solid electrolyte composition for cathode according to claim 1, wherein said polyether polymer is a copolymer of a photo-crosslinkable oxirane monomer.
  - 4. The solid electrolyte composition for cathode according to claim 1, wherein said polyether polymer has a weight-average molecular weight of 100000 to 1500000.
  - 5. A cathode film for batteries produced by subjecting the solid electrolyte composition as claimed in claim 1 to molding and then a crosslinking reaction by irradiation of an ultraviolet light.
  - 6. A process for producing a cathode film for batteries, comprising the steps of:

blending a polyether polymer containing an electrolyte salt compound, an active material of positive electrode, conductive fine particles and a photopolymerization initiator with each other, said photopolymerization initiator being present in an amount of 2 to 30 parts by weight on the basis of 100 parts by weight of the polyether polymer;

molding the resultant blended mixture into a film; and

subjecting the film to a crosslinking reaction by irradiating an ultraviolet light.

7. The process according to claim 6, wherein a cumulative dose of the ultraviolet light irradiated is in the range of 10000 to 100000 mJ/cm<sup>2</sup>.